

USAWC STRATEGY RESEARCH PROJECT

**DEVELOPING INTUITIVE OFFICERS TO REVOLUTIONIZE TRANSFORMATION  
IN THE 21<sup>ST</sup> CENTURY MILITARY**

by

Lieutenant Colonel Mark M. McLeod  
United States Air Force

Colonel Stephen Shambach, USA  
Project Advisor

This SRP is submitted in partial fulfillment of the requirements of the Master of Strategic Studies Degree.  
The views expressed in this student academic research paper are those of the author and do not reflect  
the official policy or position of the Department of the Army, Department of Defense, or the U.S.  
Government.

U.S. Army War College  
CARLISLE BARRACKS, PENNSYLVANIA 17013

## Report Documentation Page

*Form Approved  
OMB No. 0704-0188*

Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.

1. REPORT DATE <b>03 MAY 2004</b>	2. REPORT TYPE	3. DATES COVERED -		
4. TITLE AND SUBTITLE <b>Developing Intuitive Officers to Revolutionize Transformation in the 21st Century</b>		5a. CONTRACT NUMBER		
		5b. GRANT NUMBER		
		5c. PROGRAM ELEMENT NUMBER		
6. AUTHOR(S) <b>Mark McLeod</b>		5d. PROJECT NUMBER		
		5e. TASK NUMBER		
		5f. WORK UNIT NUMBER		
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) <b>U.S. Army War College, Carlisle Barracks, Carlisle, PA, 17013-5050</b>		8. PERFORMING ORGANIZATION REPORT NUMBER		
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)		10. SPONSOR/MONITOR'S ACRONYM(S)		
		11. SPONSOR/MONITOR'S REPORT NUMBER(S)		
12. DISTRIBUTION/AVAILABILITY STATEMENT <b>Approved for public release; distribution unlimited</b>				
13. SUPPLEMENTARY NOTES				
14. ABSTRACT <b>See attached file.</b>				
15. SUBJECT TERMS				
16. SECURITY CLASSIFICATION OF:		17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES <b>39</b>	19a. NAME OF RESPONSIBLE PERSON
a. REPORT <b>unclassified</b>	b. ABSTRACT <b>unclassified</b>			



## ABSTRACT

AUTHOR: Lieutenant Colonel Mark Michael McLeod

TITLE: Developing Intuitive Officers to Revolutionize Transformation in the 21<sup>st</sup> Century Military

FORMAT: Strategy Research Project

DATE: 19 March 2004 PAGES: 29 CLASSIFICATION: Unclassified

The Department of Defense (DoD) officer socialization process fails to develop sufficient numbers of strategic leaders with the intuition and Emotional Intelligence (EI) necessary to head a changing 21<sup>st</sup> Century force, jeopardizing future transformation. This paper proposes building a process to grow intuitive leaders, those with the ability to synthesize elements of past experience and apply them in novel situations, in an environment where social controls foster shared values. It is in such a culture where EI leaders, those who can manage their feelings and balance motives with ethical behavior, have the chance to institutionalize transformation.

The DoD, together with institutions around the world, lies at a crossroads; how do we transform into a 21<sup>st</sup> century military capable of revolutionary performance? While there is no single transformation model, current service plans focus on three areas: technology, doctrine, and personal development. The personnel piece is the focus of this proposal; building more flexible officers to unleash an organization capable of adapting to an unknown future.

The officer development system, including day-to-day socialization, performance feedback, and promotion processes, largely ignores strategic leadership skills like intuition and EI. As a result, effectiveness and efficiency remain the primary success determinants for promotion. In order to achieve revolutionary transformation in personnel, intuition and EI skills should be directly incorporated into current socialization, training, and evaluation programs. The eventual goal is to change the military's culture by creating a new on-the-job leader development system which cultivates, develops, and promotes officers' intuitive and EI skills.



## TABLE OF CONTENTS

ABSTRACT.....	II
PREFACE.....	IV
LIST OF ILLUSTRATIONS .....	V
DEVELOPING INTUITIVE OFFICERS TO REVOLUTIONIZE TRANSFORMATION .....	1
WHAT IS ORGANIZATIONAL CULTURE? .....	2
TODAY'S VIEW OF TRANSFORMATION .....	3
PROFESSIONAL SOCIALIZATION.....	5
INTUITION AND TRANSFORMATION .....	7
DEVELOPING INTUITION AND EI IN TODAY'S FORCE .....	9
RECOMMENDATIONS .....	12
SUMMARY.....	16
ENDNOTES .....	19
BIBLIOGRAPHY .....	25



## PREFACE

This study explores the issue of transformation, specifically the organizational development of more flexible officers capable of leading in an as yet unknown future, from the perspective of cultural change in the military. It looks at the limited aspects of intuition and Emotional Intelligence, building a case for changes to the existing socialization process through the use of a new development and appraisal system based on multi-rater feedback.

There are a number of aspects to cultural change beyond organizational development. Behavioral scientists condense cultural change into three additional categories: new leadership, reorganizations, and technology insertion. This investigation focuses entirely on the social aspects of organizational leadership development, since individual skills, behaviors and attitudes already have extensive research and form the basis for professional development today. There are additional aspects that affect organizational development, such as individual and organizational training. However they are not explored in this investigation.

This paper also restricts application of this approach to officers. Undoubtedly these principles have applications beyond officer development, to both enlisted and civilian cadres. Expansion of this idea is better left to future researchers who can address the unique needs of these groups.

I wish to thank Colonel Stephen Shambach, and Dr. Leonard Wong of the United States Army War College for their assistance and insightful contributions to this research.



## LIST OF ILLUSTRATIONS

FIGURE 1. COMPETITIVE ARMY JURISDICTIONS .....	4
FIGURE 2. PRIMARY MBTI FUNCTIONS.....	7
FIGURE 3. DISTRIBUTED LEADERSHIP ROLE MODEL.....	8



## DEVELOPING INTUITIVE OFFICERS TO REVOLUTIONIZE TRANSFORMATION IN THE 21<sup>ST</sup> CENTURY MILITARY

"It must be considered that there is nothing more difficult to carry out, nor more doubtful of success, nor more dangerous to handle, than to initiate a new order of things."

— Machiavelli

The Department of Defense's (DoD) officer socialization process fails to develop and promote sufficient numbers of strategic leaders with the intuition and Emotional Intelligence (EI) necessary to head a changing 21<sup>st</sup> Century force, jeopardizing future transformation. This paper proposes building a process to grow intuitive leaders, those with the ability to synthesize elements of past experience and apply them in novel situations, in an environment where social controls foster organizational culture and shared values.<sup>1</sup> It is in such a culture where EI leaders, those who can manage their feelings and balance motives and drives with conscientious and ethical behavior, will institutionalize transformation across the military.<sup>2</sup>

The DoD, together with institutions around the world, lies at a crossroads; how do we transform into a 21<sup>st</sup> century military capable of revolutionary performance? While there is no single transformation model, current service plans focus on three areas: technology, doctrine, and personal development. The personnel piece is the focus of this proposal; building more flexible officers to unleash an organization capable of adapting to an unknown future.

The officer development system, which includes day-to-day socialization, performance feedback, and promotion processes, largely ignores strategic leadership skills like intuition and EI. As a result, technical skills, effectiveness and efficiency remain the primary success determinants for promotion. Officers with technical competence compete most favorably for senior level strategic positions, resulting in a large percentage of "technocrats" rising to the top of the ladder.<sup>3</sup> In order to achieve revolutionary transformation in personnel, intuition and EI skills should be directly incorporated into current socialization, training, and evaluation programs through the use of 360 degree, or multi-rater appraising. The goal is to change the military's culture by creating a new on-the-job leader development system which cultivates, develops, and promotes officers' intuitive and EI skills.

Achieving transformational change requires new mentoring and evaluation processes to create a positive environment for intuitive development. The risk is that if adopted inappropriately, the organizational culture will not change and transformation will be relegated to slower evolutionary growth. The consequences are unrealized transformation potential, and a less effective future fighting force. One way to achieve the revolutionary change demanded by

transformation is to alter the organizational climate with an increased emphasis on intuition and EI, rather than technical competence. In order to better understand this concept, we need to understand just what organizational culture is, and the mechanisms available to change it.

### **WHAT IS ORGANIZATIONAL CULTURE?**

The U.S. military has a defined and unique organizational culture based on two components. The first are values, symbols, beliefs, objectives, and behaviors.<sup>4</sup> These characteristics combine to create a unique way of thinking that demands commonality from the members of the profession. In management study, these aspects are referred to as organizational strategy.

Another aspect of culture is organizational structure. This refers to the hierarchy, planning mechanisms, and personnel system which oversee the organization.<sup>5</sup> Of particular note is the personnel piece, which includes the composition of career elite, and techniques for socializing, training and promoting members.<sup>6</sup> Each aspect of strategy and structure can be altered to influence change. Stated another way, there are four ways to create cultural change: bringing in new leaders, reorganizations, technology, and organizational development.

Organizational development refers to use of social techniques to create a climate of increased trust and openness among the group.<sup>7</sup> It is these social aspects of leadership which become the focus of this investigation, as individual skills, behaviors and attitudes already have extensive research and form the basis for professional development today.

According to behavioral scientists, enduring change occurs only when an organization's entire culture is transformed. New programs are often unsuccessful without rearranged incentives, which in turn change professional behaviors. When these factors are all present, organizational change occurs. A number of circumstances must be in place for this to take place, to include pressure for change and leaders who stress the need for it. Acceptance must be won from the career elite, and new structures should align to ensure implementation. Such a structure requires new planning mechanisms, hierarchical rearrangement, and a transformed personnel system.<sup>8</sup>

There is general consensus in behavioral science that leadership development can not succeed unless the entire system focuses on objectives consistent with operating values and organizational culture.<sup>9</sup> In turn, the operating values necessary for transformation must lead to development of officers to bring about organizational excellence. Aligning personnel development standards with transformation brings strategy and structure together. If these ideas are not linked, the system will develop leaders not well suited for transformational change.

Why cultural change? It's a necessary step towards a transformational future according to Dr. Leonard Wong of the U.S. Army War College. "The current culture satisfies the needs of today. Cultural change is for tomorrow, not today."<sup>10</sup> Are the various processes and culture we have in place today optimized to create the competitive advantage, the 21<sup>st</sup> Century leader, that transformation demands? Exploring the current cultural view of transformation may lend some insight into this question.

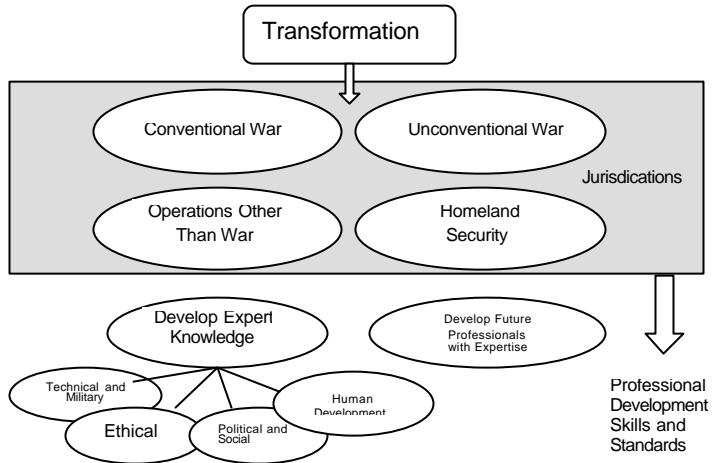
### **TODAY'S VIEW OF TRANSFORMATION**

For many years, professional stability and relatively low operations tempo meant that change was not a forced choice. Officers had time to focus on both specific skills and the need to foster innovation and change. The years following the fall of the Berlin Wall afforded a reflective period on what revolutions in military affairs meant to the U.S. military. The arrival of Transformation and the War on Terrorism signaled an end to those times.

Admiral Arthur K. Cebrowski (ret), the Director of Force Transformation for the DoD, defines transformation in four parts: transforming from an industrial-base to information-based Network Centric Warfare, ensuring a competitive advantage, broadening the capabilities base, and leveraging advantages and opportunities.<sup>11</sup> The destination is transformation of the entire culture, from roles and management of defense, to the force itself. In order to achieve what he terms "continuous" change, leaders must develop with the agility to handle future complexity and uncertainty. The problem is the current officer development process does not prepare leaders for this task.

Officers who have invested their careers socializing to the mastery of combat arms skills are experiencing "professional disorientation" when confronted with new tasks which draw little on their body of knowledge.<sup>12</sup> This is particularly true in the Army, where transformation is taking a competitive stance against traditional jurisdictions of the service (figure 1).<sup>13</sup> Army Strategic Planning Guidance now includes "transforming for the future" in the same sentence as the other "missions," implying the topic has risen to the level as roles and missions.<sup>14</sup>

Thus transformation is seen not as a component within the four existing jurisdictions, but as another separate entity in competition for resources. This creates complications for professional development, since the existing system is intended to produce a task or skill set associated for the specific jurisdictions.



**Figure 1: Competitive Army Jurisdictions.** As Transformation competes with the four traditional jurisdictions, professional development seeks to define the technical skills required for transformation.

#### TRANSFORMATION HISTORY

So where can we turn for guidance on transformation? History implies it is not so much a skill to be mastered than a process to implement. Evidence suggests that in order to succeed, leaders must develop strategy with both intellectual and organizational elements.<sup>15</sup> Intellectual inputs are visions from senior leaders, while organizational aspects talk to development of a group of supporters who create the solutions to implement change. A good example is development of carrier-based aviation during the inter-war years prior to World War II. The initial vision for this transformation took place 20 years before it was executed. During that time, advocates for the vision grew, defending it against battleship dominant admirals in the Navy.<sup>16</sup>

Similar themes play through the development of airpower and construction of the Marine Corps amphibious assault theory. In writing on this period, Williamson Murray said, “with the possible exception of the British air defense system ... bringing new ideas and concepts of fighting to fruition was a long process. This suggests that effective military innovation is evolutionary rather than revolutionary.”<sup>17</sup>

One way forward then, follows the path of long-term development of like-minded advocates. Over time, these people develop the ideas necessary to make visions become reality. The time it takes to grow a cadre of supporters allows for socialization to these new

theories. These were, in fact, informal attempts at career development, subject to the competition of alternate ideas. The examples also suggest a direct relationship between transformational change and socialization.

This process may work again with regard to modern military transformation. The relevant question is, given our current war on terror and the desire to transform the force quickly, do we have the time to wait for innovation to emerge, or should the DoD develop a new socialization process to change the current culture and accelerate that growth?

### **PROFESSIONAL SOCIALIZATION**

Socialization is the process whereby an individual acquires the knowledge and skills needed to perform a social role effectively.<sup>18</sup> Learning comes primarily through daily interactions with others who already understand their group role. Think of this as “on-the-job” training for values and behaviors. The end goal is for each person to develop an individual identity with the organization.

In the military, this self-image generally takes the form of an independent leader with mastery of the tasks of the organization. Criteria such as crisis action, efficiency and effectiveness are the basic behaviors reinforced to officers. While development of leaders under this socialization process is critical to daily organizational success, it may not reinforce the skills necessary for transformation.

William Agor described the outcome of this process in 1983 for *The Futurist* magazine, stating, “we have been socialized to not make decisions and judgments until more factual information can be obtained.”<sup>19</sup> These behaviors are ultimately reinforced through appraisal and promotion systems. In fact, superiors tend to give subordinates with like behaviors higher evaluations than those who do not, in effect institutionalizing the socialization process.<sup>20</sup> Similar concerns were echoed in the June 2000 *Army Training and Leader Development Panel Officer Study Report*, which found an “out of balance” Army culture, “inadequate leader development experiences”, for junior officers, and “diminishing contact between seniors and subordinates.”<sup>21</sup>

After many years of promoting officers with exceptional tactical and operational abilities, the DoD is now looking for officers who can rapidly transform the services towards an as yet unknown future. This prompted a reaction from a recent Army leadership symposium, which discussed intuition and its role in the 21<sup>st</sup> century Army. Their question was how to develop intuition, which is believed to be an important characteristic of future leaders inside the institution of the Army.<sup>22</sup>

## COUP D'OEIL: BATTLEFIELD INTUITION

Why does the Army believe intuition to be a critical skill for future strategic leaders? For that answer, we need turn no further than Carl Von Clausewitz in *On War*. He uses the term “coup d’oeil” to describe intuition, calling it a high level of situational awareness that the mind would ordinarily miss or would perceive only after long study and reflection.<sup>23</sup> Clausewitz also termed this ability “genius,” associating owners of this capacity with “appropriate intellect and temperament.” Similar conclusions are drawn by other war theory authors like Jomini and Sun Tzu, and Army Field Manual (FM) 22-100 tells leaders to understand this principle in order to have success in command.<sup>24</sup>

Psychologist Carl Jung called intuition one of the four basic psychological functions: “(the) function that explores the unknown, and senses possibilities and implication which may not be readily apparent.”<sup>25</sup> Even Albert Einstein believed strongly in intuition, stating “objective physical reality can only be grasped by an intuitive leap.”<sup>26</sup> The Services, in pursuit of transformation, are searching for ways to develop and reward intuition … a quality Clausewitz, along with intellectuals from a variety of other professions, highlight as valuable and important.

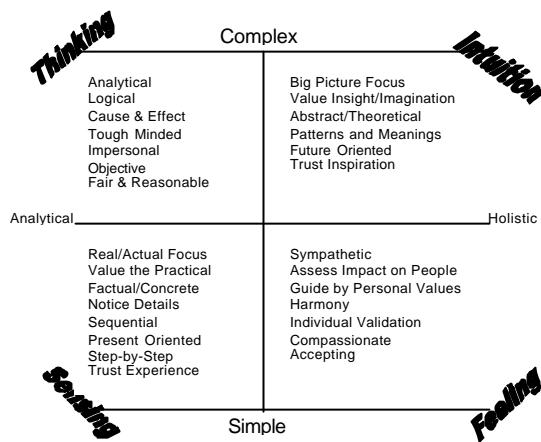
Intuition is a core building block for a number of critical traits. According to Emotional Intelligence expert Daniel Goleman, these range from self-awareness to social and relationship management.<sup>27</sup> John Maxwell, writing in his book, *The 21 Irrefutable Laws of Leadership*, says that intuition is the result of a combination of natural ability, learned skills, and broad experience.

Through intuition, leaders become readers of certain “intangibles”, recognized as critical to strategic success.<sup>28</sup> These include situational awareness, trend analysis, systems thinking, and consensus building. What is also becoming clear to those who have studied intuition is the need for strategic leaders to utilize socially-oriented techniques, like developing shared vision, to ensure that culture and values prevail amongst the organizations members.<sup>29</sup> This is the realm of Emotional Intelligence.

EI has two basic components. The first is interpersonal skills, like perceiving and expressing emotions to facilitate decision making. The other category is intrapersonal skills, or the ability to use emotions in support of social control. Developing EI skills like empathy, collaboration, and creativity encourages the development of social control through participatory management. They are also thought to offer a competitive advantage through alignment of culture and human resource development processes.<sup>30</sup> The importance and value of intuition, and its associated social control skills of EI, are recognized across a range of professions. But does it play a direct role in transformational change?

## INTUITION AND TRANSFORMATION.

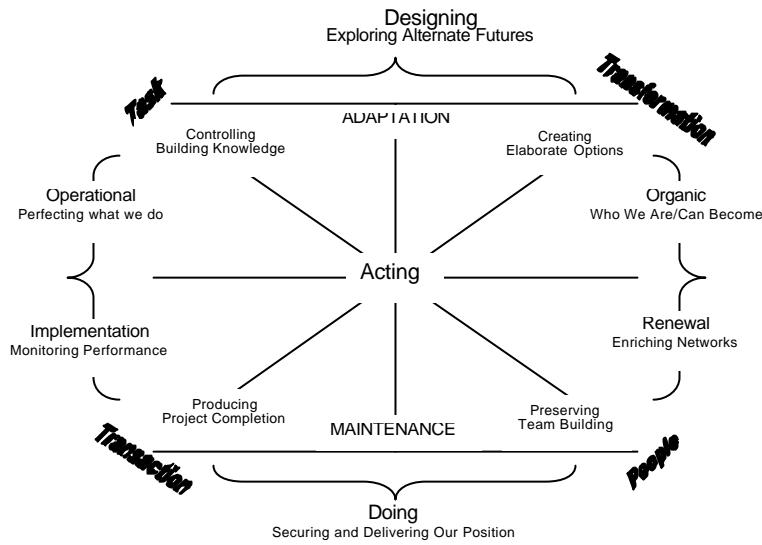
Over the past 10 years, behavioral science has shown a direct link between intuition and transformation. This work is based on Jungian psychological typologies through Myers-Briggs Type Indicator (MBTI) preferences, which break typologies down into four categories: Thinking, Sensing, Feeling, and Intuition. Each typology (Figure 2) reflects differing reactions to situations.<sup>31</sup> For example, intuitives tend to favor participatory management styles, the type of leadership style associated with transformational change, while thinkers and sensors are more autocratic in nature.



**Figure 2: Four Primary Functions of the Myers-Briggs Typology Indicator.** Behavioral Science suggests a strong relationship between MBTI characteristics and leadership.

From this work, Dr. Neil McAdam developed a correlation between brain style and organizational transformation. McAdam's work builds on the 1997 research of Limerick (et al), who postulated that success in a complex strategic environment demands a "socially constructed" rather than "impersonally observed" approach.

This is because change in a volatile and complex environment requires consensus building through social interaction, not autocratic skills associated with the lower left quadrant of figure 2. Based on these observations, the researchers built a model which overlays personality preferences from the MBTI against organization strategies like production and transformation (figure 3).<sup>32</sup>



**Figure 3: Brain Styles Model of Distributed Leadership Roles.** McAdams research showed a link between MBTI functions and transformation.

This research confirms that the skills and values represented in the lower left maximize operational efficiency (as previously noted). They are the anchors of continuity in a stable world of pre-determined goals. On the other hand, the upper-right section highlights the strategic leadership skills necessary for transformation.

The results showed that transformation is directly associated with the intuitive brain preferences expressed in the MBTI. Intuitive MBTI personalities have the characteristics to execute transformational change. The researchers also concluded that developmental education could take non-intuitives towards the desired characteristics, as represented by the various continuums across and between the quadrants.

This phenomenon has been obvious to military leaders for some time. During World War II, the Japanese observed that intuition began to appear after months of intense repetitive training in a cohesive unit.<sup>33</sup> During the same time, the Germans referred to the capacity to make rapid, intuitive decisions in combat as “character,” attempting to identify intuition during recruiting, and then cultivate it by forcing officers to repeatedly make decisions under stressful situations throughout their professional schooling. The Marine Corps continues this approach today in a training simulation called the Combat Decision-making Range (CDR), putting leaders in battlefield simulations requiring them to make decisions across the spectrum of conflict.<sup>34</sup>

Different MBTI brain styles pose problems for organizations. Intuitive leaders may have better participative management skills, but analytical bosses generally dominate senior level leadership positions. As a result, intuitives rarely emerge. This is a problem considering the balance of analytics among managerial samples. In McAdam's research, over 26,000 industry executives were compared. The findings showed a large majority of the senior level candidates were lower-left quadrant residents.<sup>35</sup> This is the same relative imbalance Psychologist Otto Kroeger reported finding in the U.S. military during his MBTI presentations to the U.S. Army War College in October 2003, putting the figure above 60 percent across the DoD.

This research supplies important inferences with regard to developing the characteristics required to be a transformational leader, and identifies some underlying dynamics to foster change. Taken in total, it suggests that the process of intuitive development (the organizational environment) is more important than the product in the short term. If we apply this conclusion to the military, we find officer development focusing too heavily on individual skills development, rather than creating an on-the-job process that fosters intuition and EI. In that light, let's now turn to the larger question of how to develop intuition and EI, analyzing the current processes and proposals for development of these skills.

### **DEVELOPING INTUTION AND EI IN TODAY'S FORCE**

The military today addresses transformational leadership development as a training issue through individual learning, professional military education, continuing education opportunities like the commander's reading program, and career specialization. Surprisingly, it also relies on what could be termed an acceptance of responsibility. When a DoD transformation official was recently asked to define the process for officer transformation development, he suggested that officers should realize the value of this vision and jump on-board.<sup>36</sup> But as the old bromide suggests, this is no way to run a railroad, because the various existing approaches, addressed below, largely ignore socialization and the body of contradictory scientific evidence.

#### **INDIVIDUAL TRAINING**

Does everyone have intuition? According to Michael Driver, a professor at the University of Southern California business school, the answer is yes. Although society doesn't encourage it, "almost everybody has the capacity to do logical and more creative processing of information."<sup>37</sup> He finds traditional training programs to be very analytic, concluding that we are producing "half people" whose ability to handle problems is limited.

Although individual training has been around for centuries in the form of yoga and other awareness disciplines, the science is soft and does not make for a good fit with the military's

existing professional development curricula. The Internet has brought about numerous self-help sites that claim to build these skills.<sup>38</sup> Perhaps most interesting is the development of intuition-based university education training in business, nursing, and engineering schools.<sup>39</sup> The Army also dabbles in intuition learning in on-line and web-based applications. The U.S. Army Research Institute for Behavioral and Social Sciences recently published the results of a study called Leadership Tacit Knowledge – Online, the goal of which was the development of intuition in an on-line environment.<sup>40</sup>

These individual training programs speak directly to the importance intuition development receives today across a variety of professional and educational disciplines. While they hold out hope for a technological revolution in training identified by the 2001 Quadrennial Defense Review, there are drawbacks. These applications carry long lead time and high developmental costs, and would continue to add to the training burden of the high operations tempo today. They also fall short with regard to social interactions among adult learners, which is a contributing factor to successfully training intuition.<sup>41</sup>

#### PROFESSIONAL MILITARY EDUCATION

Intermediate and Senior Service School assignments mark formal transitions in an officer's development towards strategic leadership. Significant portions of the curricula are devoted to leadership (e.g. Course 1 in Army War College, lasting 8 weeks), although relatively little is specific to intuition or EI concepts.<sup>42</sup> Additional training could be introduced to enhance PME curricula. However critics like Charles Moskos disagree with this approach.

In his book *The Military: More Than Just a Job*, Moskos found no compelling evidence that PME increased holistic or institutional thinking in a career force.<sup>43</sup> This conclusion was echoed by authors Snider and Watkins in their book, *The Future of the Army Profession*. With regard to the officer development program, "Twenty-plus years of professional socialization do not equip future senior leaders ... to navigate the ambiguities" of strategic leadership. Their argument is that experiences learned during a career, to include PME, are inadequate.<sup>44</sup> Immediate supervisors play the most significant role in officer development, and a solution which does not address socialization falls short of the mark.

#### TASK SPECIFIC TRAINING AND THE JOINT STAFF

Another method of attacking this problem is through the creation of highly specialized officers via mandatory interagency tours. The Report of the National Defense Panel of 1997 recommended creating "an interagency cadre of professionals whose purpose would be to staff key positions in the national security structures, thus building on the 1986 Goldwater-Nichols

Act.<sup>45</sup> This would be a good step towards developing more highly skilled joint officers with deeper breadth of knowledge and military-civilian relations experience. Additionally, officers who excel in these jobs may garner more promotions, thus addressing the shortage of transformational leaders. However this approach falls short of the mark in several important areas.

First, it does not provide training for the entire officer corps. While the interagency is an important part of puzzle, transformation demands are not restricted to this realm. Pursuing this option doesn't address change in service specific responsibilities. Specialty also fails to account for the broad range of experience needed for transformation success, and fails to address the important issue of professional socialization, choosing instead to take the current system and refine it even more.

#### CAREER SPECIALIZATION

When knowledge is focused in a small specialty area, the breadth of alternate information available to achieve creative synthesis is missing. Many consider technical expertise to be the critical component for career success. But Pelz and Andrews found the most productive people were those who specialized in more than one technical area. Productivity was greater among those who worked at several levels, including both basic and applied applications.<sup>46</sup> Although this work focused on a population of scientists and engineers, the authors generalized their conclusions to the larger population, confirming that specialization impedes intuition and innovation.

The military today attempts to provide this breadth of experience through frequent rotations in a variety of positions, locations, and leadership experiences (i.e. branch qualification in the Army). However this approach falls short because the opportunities still tend to focus on a deeper understanding of the core career field, and not everyone gets the chance to experience this path due to limited opportunities. These efforts, although well intentioned, do not go far enough towards providing the broad depth required for intuitive synthesis. The military today remains essentially a specialty-based force.

Take for example the United States Air Force's reorganization of the aircraft maintenance career field in 2002. Like the Army, the Air Force develops officer's through a variety of branch qualification positions. Also like the Army, the Air Force believed that the current development system inadequately prepared officers for future leadership positions. The move to reorganize aircraft maintenance was thus designed to focus specialization and professional development almost exclusively within the career field. Again this may work great for organizational

effectiveness, but not for transformation. Similarly, the Army Military Intelligence career fields call for strict specialization in a technologically burgeoning profession was necessary in order to avoid what they term being a “jack of all trades,” and master of none.<sup>47</sup>

### **SOCIALIZATION TRAINING**

During the 1970's, behavioral scientist F. M. Andrews conducted research in the area of personality characteristics and innovation. He found traits traditionally associated with transformational leaders, like creativity and intelligence, had little impact on organizational innovation.<sup>48</sup> This led him to conclude the most important factor leading to transformation was an environment where innovation is expected to occur. Later studies confirmed the same correlation of environment with intuition. D. N. Perkins research, published in *The Mind's Best Work*, found that intuition could be enhanced by a favorable environment and training. His conclusions were that intuition and creativity arise naturally and comprehensibly from certain everyday abilities of perception, understanding, logic, memory, and thinking style.<sup>49</sup>

When subordinates know the goals, receive honest feedback towards those ends, and are rewarded for achievements, organizations flourish. Intuition and EI, important to battlefield and boardroom leaders, should be nurtured in this way if we are to realize the full potential of transformation. The review of organizational culture, transformation history, and behavior science illuminates this path. The solution to creating a revolutionary leadership development program involves changes to existing socialization processes to create an environment where intuition and EI flourish.

### **RECOMMENDATIONS**

In order to deliberately develop professional leaders who are intuitive and Emotionally Intelligent, the profession must clearly understand the need for cultural change, and the relationship between intuition, EI and transformation. This is the first step towards creation of what General Charles Krulak called “fostering a climate that is supportive of intuitive skills development.”<sup>50</sup> Based on this investigation, I believe altering the socialization culture will require a three-step process; creating new standards of performance, changing specific development functions, and codifying the changes in the appraisal system.

### **NEW STANDARDS OF PERFORMANCE**

Institutionalizing this concept requires two parallel initiatives; educating everyone with regard to these new processes, and developing new performance feedback and performance report processes to embrace intuition and EI skills development. The structural aspects, which

allow for true cultural change, involve aligning development and promotion processes with vision.

An education program must be built for all commissioned officers to explain the concepts, responsibilities, and implementation schedule for creating a favorable environment for developing intuitive and EI skills. In addition, enlisted and officer PME curricula at all applicable levels should be changed to include study, review, and reflection on the new development process.

Performance expectations (feedback and evaluation) must broaden to include a wide range of intuitive and EI leadership skills.<sup>51</sup> These may include:

**Self-awareness**—awareness of feelings and the ability to recognize and manage them

**Emotional resilience**—the ability to perform in a range of situations under pressure

**Sensitivity**—understanding the needs and feelings of others

**Influence**—the ability to persuade others

The idea is to create a formal standard of performance and hold officers accountable for achieving it, allowing for the natural development and reinforcement of intuition (thus transformational behaviors) through daily experience.

#### CHANGING SPECIFIC DEVELOPMENTAL FUNCTIONS

There are a number of steps that can be taken to reinforce the philosophy. For example, scenarios at the National Training Center can be set up to include unpredictable shifts (i.e. from combat to reconstruction campaign phases) to encourage mental agility and adaptation.

Professional military education curricula could include exercises which encourage officers to think about current campaigns and real-world scenarios (like the Global War on Terrorism) in addition to historical examples and fictional situations. PME can also play a role in strengthening the officer mentoring program. Schools should provide students with the skills necessary to counsel subordinates with regard to their abilities of perception, understanding, logic, memory, and thinking styles, not just the bottom line of mission accomplishment.

On-the-job or operational assignment opportunities in the field also exist. For example, organizational missions in the US Air Force often team inexperienced aircraft maintenance officers with experienced senior non-commissioned officers to lead unit deployments. This allows young officers the opportunity to function as field-grade commanders with no supporting senior officer overhead. Examples like these are undoubtedly the tip of the creative iceberg with

regard to adaptive learning. However operational experience alone will not effect the changes designed unless the performance appraisal system can capture the new standards.

#### CODIFYING THE CHANGES IN THE PERFORMANCE APPRAISAL SYSTEM

As previously noted, the current appraisal system rewards technical competence and link-minded behavior. So how do you break this cultural bias in order to recognize and reward development of intuition and Emotional Intelligence? By introducing the feedback of peers and subordinates, the people most affected by application of these new standards, into the existing performance appraisal system.

A new process tool is available to facilitate this cultural change; it's called 360-degree, or multi-rater appraising. It was developed in the early 1990's in response to the increased use of team problem solving in business, flatter organizations, and greater internal change.<sup>52</sup> This allowed companies like Digital Equipment and Johnson & Johnson to emphasize the importance of certain facets of their business in a changing environment, like self-directed teamwork and development. When coupled with flatter organizations and fewer supervisors, multi-rater feedback was a natural fit.

The similar nature of military leadership, with officers moving from job to job throughout a career, can make 360-appraising useful for the DoD ... particularly in the volatile 21<sup>st</sup> century environment. In fact, the concept is already being used in the US Army War College, where multi-rater appraisals and other psychological tools provide officers with useful insight into their leadership styles.

Multi-rater appraising is an excellent tool for addressing cultural change because it establishes accountability across the spectrum of relationships. Individual leader development is linked with the organization to measure and foster more effective units, creating a climate of trust and openness in the group. Subordinates, peers, and supervisors all participate in rating individuals. According to the US Department of Personnel Management, these assessments can provide valuable developmental guidance, define excellence, and rate the quality of a team's results with both internal and external customers.<sup>53</sup> One of the major advantages to this new process is that all the information can be gathered and analyzed on-line. The supervisor then summarizes the information during the formal appraisal, translating the feedback into accountability for the new standard.

If 360-appraising were applied in this case, those with the best developed intuition and EI skills, along with strengths in the existing measures of performance, would form the pool of potential selectees for promotion. In the end, this change accomplishes what Charles Moskos

believed was necessary to improve our socialization process: "Promotion criteria must favor those leaders who are most concerned with group improvement."<sup>54</sup>

Change is necessary for the annual appraisal form in order to reflect the 360-appraisal results across the spectrum of performance standards. Only minor changes are required to the existing appraisal forms. For example, the inclusion of a line "Intuitive Skills and Emotional Intelligence composite score" section could accurately capture the assessment of these important skills. As officer's compete for promotion, their Intuitive Skills Development scores would become a discriminator for promotion. Not the sole discriminator, but another factor of consideration based on service needs.

Intuition and EI should take their rightful place alongside the many criteria already used to judge performance. They should not however, unnecessarily dominate the existing processes and standards. That's because many aspects of our current system remain legitimate because of continuity, morale, and relevance to future requirements.<sup>55</sup> In the right context, 360 degree appraising provides more meaningful feedback on all standards of performance, to include intuition and EI, the skills necessary for transformation. More importantly, the establishment of the appraisal requirement reinforces a positive cultural and socialization environment through the alignment of organizational goals, professional development, and promotion.

#### HURDLES TO IMPLEMENTATION

This approach to building transformational leaders has a number of attractive benefits. More than 50 companies now create multi-rater appraisal tools, so development time and costs for the new tool are low. Implementation costs are low because this proposal simply builds on existing mentoring, education, performance feedback, and appraisal programs. Despite these advantages, the concept will be challenging to implement because it demands change to the professional culture of the military. One can anticipate three major criticisms of this approach.

First, that the current appraisal system already considers transformational leadership behaviors. Today's approach does indeed attempt to address these issues. Take for example the Army officer performance appraisal, which addresses characteristics of transformational leaders in sections b1-3 (Emotional) and b3 (Developing, Building, and Learning).<sup>56</sup> Unfortunately they are evaluated under the same light as the other parts of the form through a single-loop supervisor feedback system that may or may not accurately capture how well an officer achieves these standards.

The next criticism is that current operations tempo and training requirements don't allow enough time to implement a new program. This could prove true if the new system is more

difficult than the current process. 360-degree appraising is not without its critics. Despite the convenience of internet-based tools, it can be more time consuming and administratively complex due to the identification of subordinate and peer raters. Issues can arise regarding the confidentiality of subordinate raters and their willingness to speak openly about the performance of a superior.<sup>57</sup> There are concerns with the possible subjectivity of the measuring system, and the intimidation factor with giving and receiving feedback. However none of these issues has stopped the many organizations currently using 360-appraising, and these issues differ little from the current challenges of the appraisal system. Taking care to create a quick and easy internet-based tool should alleviate much of the anxiety associated with this concern.

Can an officer maintain good order and discipline in a situation where they receive feedback from subordinates and peers? What prevents them from running popularity contests in order to receive strong ratings from their subordinates and peers? The answer is accountability. The current officer development system demands individual accountability to the point (in some cases) of overemphasis of individual versus organizational success. The addition of intuitive and EI techniques as a means of social control, combined with the accountability provided by subordinate, peer, rater, and senior rater feedback strengthens, not weakens, officer accountability and development.

It will take time and much effort, but if discussed openly and honestly, intuition and Emotional Intelligence can be embraced. By specifically targeting the socialization aspects of development, and formalizing these changes with multi-rater feedback, the end results will be a changed organizational culture and the development and promotion of more intuitive and EI savvy leaders for the transformed 21<sup>st</sup> century military.

#### **SUMMARY: TRANSFORMATION VIA SOCIALIZATION**

Personnel development, one of the three basic tenets of DoD transformation is vital to future success. Failure of the DoD to adopt transformational change to the leader development process shirks the responsibilities it has in this critical area. In order to avoid the methodical and evolutionary pace of past transformations, bold policy must be enacted.

Revolutionary leader development requires changes to organizational socialization, development, and promotion processes, creating an environment where intuition and Emotional Intelligence naturally flourish. Codifying these changes through the use of 360 degree appraising can achieve the goal of developing and promoting intuitive and transformational leaders. This proposal embodies bold policy with low cost and risk ... affording the opportunity

to change the performance standards, but keep a significant portion of the existing organizational structure because it is still relevant.

Morris Jannowitz noted this required change to the nature of authority three decades ago, arguing for a change from domination to influencing behaviors based on achievement, goals, indirect techniques, and group permissions.<sup>58</sup> He went on to write:

The technology of warfare is so complex that the coordination of a group of specialists cannot be guaranteed by authoritarian discipline. The complexity of machinery and the resultant interdependence produce an important residue of organization power for each member.<sup>59</sup>

This is clearly the realm of Emotional Intelligence, a participatory leadership style key to changing the culture of the military. Cultivating and promoting the development of intuitive and EI leaders through the use of multi-rater appraising is the best way to align professional behaviors with organizational goals, ensuring both innovative leadership development and future security.

WORD COUNT= 5912



## ENDNOTES

<sup>1</sup> Boas Shamir, and Eyal Ben-Ari, "Leadership in an Open Army? Civilian Connections, Interorganizational Frameworks, and Changes in Leadership", in *Out of the Box Leadership: Transforming the 21<sup>st</sup> Century Army and Other Top-Performing Organizations*, ed. James G. Hunt, George Dodge, and Leonard Wong (Stamford, Connecticut: JAI Press, Inc, 1999).53-54.

<sup>2</sup> Malcom J. Higgs and S.V.D. Dulewicz, *Making Sense of Emotional Intelligence* (Windsor: NFER-Nelson, 1999), 20.

<sup>3</sup> Perry Pascarella, "We've Let Technocrats Lead Us Astray," *Management Review*, Sept 1997, 30.

<sup>4</sup> Rob Goffee and Gareth Jones, *The Character of a Corporation: How Your Company's Culture Can Make or Break Your Business* (New York: Harper Business, 1998), 15.

<sup>5</sup> Wallace E. Walker, *Changing Organizational Culture: Strategy, Structure, and Professionalism in the U.S. General Accounting Office* (Knoxville: University of Tennessee Press, 1986), 11.

<sup>6</sup> Ibid.

<sup>7</sup> Andrew J. Durbin, *Fundamentals of Organizational Behavior: An Applied Perspective* (New York: Pergamon Press Inc, 1974), 347.

<sup>8</sup> Walker, 12-13.

<sup>9</sup> Michael L. McGee, T. Owen Jacobs, Robert N. Kilcullen, and Herbert F. Barber, "Conceptual Capacity as Competitive Advantage: Developing Leaders for the New Army", in *Out of the Box Leadership: Transforming the Twenty-First Century Army and Other Top-Performing Organizations*, ed James G. Hunt, George Dodge, and Leonard Wong (Stamford, Conn: JAI Press, Inc., 1999), 235.

<sup>10</sup> Leonard Wong, *Stifling Innovation: Developing Tomorrow's Leaders Today* (Carlisle, PA: Strategic Studies Institute, U.S. Army War College, 2002), 31-32.

<sup>11</sup> The ideas in this reference are based on remarks made by Admiral Arthur K. Cebrowski (ret) while participating in the USAWC Commandant's Lecture Series 29 Oct 03.

<sup>12</sup> Martin L. Cook, "Army Professionalism: Service to What Ends?", in *The Future of the Army Profession*, ed. Don M. Snider and Gayle L. Watkins (New York: McGraw-Hill Co., 2002), 347.

<sup>13</sup> Gregg F. Martin and Jeffrey D. McCausland, "The Role of Strategic Leaders for the Future Army Profession", in *The Future of the Army Profession* (New York: McGraw-Hill Co. 2002), 431. The competitive jurisdictions of the Army Profession are defined in Figure 1-1 of the book. They are Conventional War, Operations other than War, Unconventional War, and Homeland Security. Martin and McCausland argue that Army transformation is an attempt to renegotiate legitimacy in the conventional war jurisdiction after losing some of that legitimacy because of a lack of strategic mobility during the late 20<sup>th</sup> Century.

<sup>14</sup> Department of the Army, *U.S. Army Strategic Planning Guidance*. The Army Plan, Chapter 1, page 9. The Army mission is to conduct homeland security operations, provide Title 10/32 support to combatant commanders as they execute the current global war on terrorism and prepare for other assigned missions in defense of our national interests, while transforming for the future.

<sup>15</sup> Richard O. Hundley, *Past Revolutions, Future Transformations: What Can the History of Revolutions in Military Affairs Tell Us About Transforming the U.S. Military?* RAND Report MR-1029-DARPA (Santa Monica, CA: RAND, 1999), 21-34.

<sup>16</sup> Lt Col Mark P. Jelonek, *Toward an Air And Space Force: Naval Aviation and the Implications for Sea Power* (Maxwell AFB, AL: Air University Press, 1999), 13-33.

<sup>17</sup> Williamson Murray, "Innovation: Past and Future," *Joint Forces Quarterly* (Summer 1996): 23-32.

<sup>18</sup> R.K. Merton, *Social Theory and Social Structure* (New York: Free Press, 1968), 321.

<sup>19</sup> William H. Agor, "Tomorrow's Intuitive Leaders," *The Futurist*, Nov 1983, 49-55.

<sup>20</sup> N. DiMarco and R.M. Tate, "A Cross-cultural Comparison of Superior-Subordinate MBTI Preferences and Their Relationship with Performance Ratings", in *Proceedings from the Myers-Briggs Type Indicator and Leadership: An International Research Conference*, ed. C. Fitzgerald (College Park, MD: University of Maryland University College National Leadership Institute, 1994), 61-71.

<sup>21</sup> Department of the Army, *Army Training and Leader Development Panel Officer Study Report to the Army* (Washington, D.C.: Department of the Army, 12 June 2000), 1-2.

<sup>22</sup> "How Do We Develop "Intuitive" Leaders in a Time-constrained, Technology-supported, Interneted Organization?" ODCSPER Research Topic from U.S. Army Leadership Symposium (27-29 March, 1996), available [http://cbnet/srp/srt/srt\\_brouse\\_detail.cfm](http://cbnet/srp/srt/srt_brouse_detail.cfm) . USAWC Intranet, accessed 8 Aug 03.

<sup>23</sup> Carl Von Clausewitz, *On War*, edited and translated by Michael Howard and Peter Paret (New Jersey: Princeton University Press, 1976), 102.

<sup>24</sup> Department of the Army, *Army Leadership: Be, Know, Do*, Field Manual 22-100. (Washington, D.C.: Department of the Army, 31 August 1999), 2-58, 6-104, 6-65, and 5-25.

<sup>25</sup> Francis Vaughn, *Awakening Intuition* (Garden City, N.J.: Anchor Books, 1979), 47.

<sup>26</sup> Ibid, 73.

<sup>27</sup> Daniel Goleman, "Emotional Intelligence: Issues in Paradigm Building," 30 June 2003; available from <[http://www.eiconsortium.org/research/ei\\_issues\\_in\\_paradigm\\_building.htm](http://www.eiconsortium.org/research/ei_issues_in_paradigm_building.htm)>; Internet; accessed 29 Sep 03.

<sup>28</sup> John Maxwell, *The 21 Irrefutable Laws of Leadership* (Nashville, Tennessee: Thomas Nelson, Inc, 2002), 92.

<sup>29</sup> S.G. Harris, "Organizational Culture and Individual Sensemaking: A Schema-Based Perspective," *Organizational Science*, 5 March 1994, 309.

<sup>30</sup> Ibid, 321.

<sup>31</sup> C. Fitzgerald, *Developing Leaders: Research and Applications in Psychological Type and Leadership Development* (Palo Alto, CA: Davies-Black, 1997), 33-59.

<sup>32</sup> Neil McAdam, "A Brain Styles Model of Change Responsiveness and Distributed Leadership in 21<sup>st</sup> Century Network Organizations," *International Journal of Organizational Behaviour* 5 (July 2002); 213-241.

<sup>33</sup> Charles C. Krulak, "Cultivating Intuitive Decisionmaking," May 1999; available from <<http://www.usmc.mil/cmcarticles.nsf/o/1bbdbb489365b98f8525676a005f7f36?OpenDocument>>; Internet; accessed 27 Sep 03.

<sup>34</sup> Ibid, 4.

<sup>35</sup> J. W. Fleenor, "The Relationship Between the MBTI and Measures of Personality and Performance in Management Groups," in *Developing Leaders: Research and Applications in Psychological Type and Leadership Development*, ed. C. Fitzgerald and L. Kirby (Palo Alto, CA: Davies-Black Publishing, 1997), 119.

<sup>36</sup> The ideas in this reference are based on remarks made by a speaker participating in the Commandant's Lecture Series.

<sup>37</sup> Sherman Stratford, "Leaders Learn to Heed the Voice Within," *Fortune*, 22 Aug 94, 92-98.

<sup>38</sup> Edgar Cayce, "Discover Your Intuitive Connection," 5 January 2003; available from <http://www.eciis.org/courses/desc/pc01.jsp>; Internet; accessed 3 September 2003. The Edgar Cayce Institute for Intuitive Studies is a good example of an on-line education source for intuition training. The institute has 40 different courses to choose from on this site.

<sup>39</sup> Nancy Rosanoff, "Intuition Comes of Age: Workplace Applications of Intuitive Skill for Occupational and Environmental Health Nurses," April 1999; available from <[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list\\_uids=10418345](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=10418345)>; Internet; accessed 28 August 2003. Other examples include a web-based engineering design tutor project from Rice University by collaboration team members Willy Zwaenepoel, Michael Terk, Joseph Cavallaro, and Leslie Miller (available from <http://www.citi.rice.edu/researchmellon.shtml>, and Teaching Intuition by Martin Mahy, De La Salle College, Melbourne, Australia

<sup>40</sup> "Online Learning of Complex Skills," United States Army Research Institute Newsletter Vol 12, Number 1 (Winter 2002): 11.

<sup>41</sup> Ibid, 14.

<sup>42</sup> United States Army War College Selected Readings, *Course 1: Strategic Leadership* (Carlisle Barracks, PA: USAWC, 2003), 584 pages. The concept of intuition is scarcely

mentioned in the selected readings for strategic leadership, although the related characteristics are found throughout the text. It is my opinion that the USAWC tends to take an analytic view of intuition through its various outcomes, rather than a holistic view of the subject as a precursor to those behaviors.

<sup>43</sup> Moskos and Wood, *The Military: More Than Just a Job?*, 290.

<sup>44</sup> Marybeth Peterson Ulrich, "Infusing Civil-Military Relations norms in the Officer Corps," in *The Future of the Army Profession*, ed. Don M. Snider and Gayle L. Watkins (New York: McGraw Hill Primus Custom Publishing, 2002), 248.

<sup>45</sup> Don M. Snider, "Jointness, Defense Transformation, and the Need for a New Joint Warfare Profession," *Parameters XXXIII*, No. 3 (Autumn 2003), 21.

<sup>46</sup> Donald C. Pelz and F. M. Andrews, *Scientists In Organizations: Productive Climates for Research and Development* (Ann Arbor, Mich.: University of Michigan Press, 1976), 154.

<sup>47</sup> Timothy P. Kiely, and Duane A. Dannewitz, "Military Intelligence Officer Professional Development," 1 June 1996; available from <<http://www.fas.org/irp/agency/army/tradoc/usaic/mipb/1996-2/dano.htm>>; Internet; accessed 3 September 2003. The actual quote is, "... if we send Jacks of all trades to support commanders instead of intelligence experts who make unique contributions to their organizations, we run the risk of making MI officers expendable at various levels of command."

<sup>48</sup> F.M. Andrews, "Social and Psychological Factors Which Influence the Creative Process," in *Perspectives in Creativity*, ed. A. Taylor and W. Getzels (Chicago: Aldine Publishing Co., 1975), 89.

<sup>49</sup> D.N. Perkins, *The Mind's Best Work* (Cambridge, Mass: Harvard University Press, 1981), 34.

<sup>50</sup> Charles C. Krulak, "Cultivating Intuitive Decisionmaking," May 1999; available from <<http://www.usmc.mil/cmcarticles.nsf/o/1bbdbb489365b98f8525676a005f7f36?OpenDocument>>; Internet; accessed 27 Sep 03.

<sup>51</sup> M. J. Higgs and S.V.D. Dulewicz, "Emotional Intelligence: A Review and Evaluation Study," *Journal of Managerial Psychology*; 15 (4), 341-368.

<sup>52</sup> Jayart Kirksey, "Companies Evaluate Employees From All Perspectives," 15 March 1996; available from <<http://www.quality.org/tqmbs/tools-techs/360pa.txt>>; Internet; accessed 13 September 2003.

<sup>53</sup> "Performance Management Practitioner Series: 360-Degree Assessment: An Overview," September 1997; available from <<http://www.opm.govperform/wppd/360assess.pdf>>; Internet; accessed 15 October 2003.

<sup>54</sup> Moskos and Wood, *The Military: More Than Just a Job?*, 291.

<sup>55</sup> Boaz Shamir, and Eyal Ben-Ari, "Leadership in an Open Army? Civilian Connections, Interorganizational Frameworks, and Changes in Military Leadership," in *Out of the Box*

*Leadership: Transforming the Twenty-First Century Army and Other Top Performing Organizations*, ed. James G. Hunt, George Dodge, and Leonard Wong (Stamford, Conn: JAI Press, Inc., 1999), 33.

<sup>56</sup> Department of the Army, *Officer Evaluation Report*, DA Form 67-9 (Washington, D.C., U.S. Department of the Army, 1 Oct 97).

<sup>57</sup> Jayart Kirksey, "Companies Evaluate Employees From All Perspectives," 15 March 1996; available from <http://www.quality.org/tqmbbs/tools-techs/360pa.txt>; Internet; accessed 13 September 2003.

<sup>58</sup> Morris Janowitz and Roger W. Little, *Sociology and the Military Establishment* (London, England: Sage Publications, 1974), 59.

<sup>59</sup> Ibid, 59.



## BIBLIOGRAPHY

Agor, Weston. H., "Tomorrow's Intuitive Leaders," *The Futurist*, August 1993, 46-53.

Agor, Weston. H., *Intuitive management: Integrating Left and Right Brain Management Skills*. Englewood Cliffs, N.J.: Prentice-Hall, 1984.

Allinson, C. W., Armstrong, S. J. & Hayes, J. "The effects of cognitive style on leader-member exchange: A study of member-subordinate dyads." *Journal of Occupational and Organizational Psychology*, no. 74 (2001), pp 201-220.

Andrews, F.M. "Social and Psychological Factors Which Influence the Creative Process." In *Perspectives in Creativity*, ed. A. Taylor and W. Getzels, 89. Chicago: Aldine Publishing Co., 1975.

Arieti, S. *Creativity: The Magic Synthesis*. New York: Basic Books, 1976.

Bleedorn, Berenice. D., "Making the World Safe for Intuitives." 17 March 1986. Available from <<http://www.creativityforce.com/intuitives.html>>. Internet. Accessed 28 August 2003.

Canadian National Defense Force. *Logistics Officer Professional Development*, Vol 2, Chap 2. Available from [http://www.dnd.ca/admmat/logbranch/handbook/Volume2/chap2\\_e.htm](http://www.dnd.ca/admmat/logbranch/handbook/Volume2/chap2_e.htm) . Internet. Accessed 3 September 2003.

Caraccilo, Dominic. J., and John L. Pothin. "Coup d'oeil: The Commander's Intuition in Clausewitzian Terms." *Air & Space Power Journal* (16 February 2000): 21-28.

Cayce, Edgar. "Discover Your Intuitive Connection." 15 January 2002. Available from <<http://www.eciis.org/courses/desc/pc01.jsp>>. Internet. Accessed 3 September 2003.

Clausewitz, Carl Von., *On War*. Translated by Michael Howard and Peter Paret, Princeton: Princeton University Press, 1976.

Cook, Martin L., "Army Professionalism: Service to What Ends?" In *The Future of the Army Profession*, ed Don M. Snider and Gayle L. Watkins, 59. New York: McGraw-Hill Co., 2002.

DiMarco, N., and R.M. Tate. "A Cross-cultural Comparison of Superior-Subordinate MBTI Preferences and Their Relationship with Performance Ratings." In *Proceedings from the Myers-Briggs Type Indicator and Leadership: An International Research Conference* , ed. C. Fitzgerald, 61-71. College Park, MD: University of Maryland University College National Leadership Institute, 1994.

Durbin, Andrew J. *Fundamentals of Organizational Behavior: An Applied Perspective*. New York: Pergamon Press Inc, 1974.

Fitzgerald, C. *Developing Leaders: Research and Applications in Psychological Type and Leadership Development*. Palo Alto, CA: Davies-Black, 1997.

Fleenor, J.W. "The Relationship Between the MBTI and Measures of Personality and Performance in Management Groups." In *Developing Leaders: Research and*

*Applications in Psychological Type and Leadership Development*, ed. C. Fitzgerald and L. Kirby, 119. Palo Alto, CA: Davies Black Publishing, 1997.

Goffee, Rob, and Gareth Jones. *The Character of Corporations: How Your Company's Culture Can Make or Break Your Business*. New York: Harper Business, 1998.

Goleman, Daniel. "Emotional Intelligence: Issues in Paradigm Building." 30 June 2003. Available from <[http://www.eiconsortium.org/research/ei\\_issues\\_in\\_paradigm\\_building.htm](http://www.eiconsortium.org/research/ei_issues_in_paradigm_building.htm)>. Internet. Accessed 29 September 2003.

Harris, S.G. "Organizational Culture and Individual Sensemaking: A Schema-Based Perspective." *Organizational Science*, 5 March 1994, 309-321.

Hedge, John W., and William C. Borman. "Changing Conceptions and Practices in Performance Appraisal." In *Frontiers of Industrial and Organizational Psychology: The Changing Nature of Work*, ed. Ann Howard, 145-150. New York, Josey-Bass, 1995.

Higgs, M.J., and S.V.D. Dulewicz. "Emotional Intelligence: A Review and Evaluation Study." *Journal of Managerial Psychology* 15 (October 2000): 341-368.

Higgs, M. J., and S.V.D. Dulewicz, *Making Sense of Emotional Intelligence*. Windsor: NFER-Nelson, 1999.

Huntington, Samuel, *The Soldier and the State: The Theory and Practice of Civilian-Military Relations*. New York: Vintage Books, 1957.

Hundley, Richard O. "Past Revolutions, Future Transformations: What Can the History of Revolutions in Military Affairs Tell Us About Transforming the U.S. Military?" Rand Report MR-1029-DARPA. Santa Monica, CA: RAND, 1999. 21-34.

Jannowitz, Morris, *The Professional Soldier: A Social and Political Portrait*. New York: Vintage Books, 1971.

Jannowitz, Morris, and Roger W. Little. *Sociology and the Military Establishment*. London, England: Sage Publications, 1974.

Jelonek, Mark P. *Toward an Air and Space Force: Naval Aviation and the Implications for Sea-Power*. Maxwell AFB, AL: Air University Press, 1999.

Kiely, Timothy. P., and Duane A. Dannewitz. "Force XXI: MI Officer Professional Development." *Military Intelligence Professional Bulletin*, no 2 (1996): 12-16.

Kirksey, Jayart, "Companies Evaluate Employees from All Perspectives." *Personnel Journal Online* August 2000. Journal on-line. Available from <<http://www.quality.org/tqmbbs/tools- techs/360pa.txt>>. Internet. Accessed 13 September 2003.

Krulak, Charles C. "Cultivating Intuitive Decisionmaking." Available from <<http://www.usmc.mil/cmcarticles.nsf/o/1bbdbb489365b98f8525676a005f7f36?OpenDocument>>. Internet. Accessed 27 Sep 03.

Limerick, D., Cunningham, B. & Crowther, F. *Managing the New Organization: Collaboration and Sustainability in the Post-Corporate World*. Warriewood: Business and Professional Publishing, 1988.

McGee, Michael L., T. Owen Jacobs, Robert N. Kilcullen, and Herbert F. Barber, "Conceptional Capacity as Competitive Advantage: Developing Leaders for the New Army." In *Out of the Box Leadership: Transforming the Twenty-First Century Army and Other Top-Performing Organizations*, ed. James G. Hunt, George Dodge, and Leonard Wong, 235. Stamford, Conn: JAI Press, Inc., 1999.

Mahy, Martin. "Teaching Intuition at De La Salle College." 9 January 1999. Available from <<http://www.mmahy@delasalle.melb.catholic.edu.au>>. Internet. Accessed 3 September 2003.

Martin, Gregg F., and Jeffrey D. McCausland. "The Role of Strategic Leaders for the Future Army Profession." In *The Future of the Army Profession*, ed. Don M. Snider and Gayle L. Watkins, 431. New York: McGraw-Hill Co., 2002).

Maxwell, John. C. *The 21 Irrefutable Laws of Leadership Workbook*. Nashville: Thomas Nelson, Inc., 2002.

May, Karen. E., "Work in the 21<sup>st</sup> Century: Implications for Performance Management," *Society for Industrial and Organizational Psychology Online* July 1996. Journal on-line. Available from <http://siop.org/tip/backissues/TIPJul 96/May.HTM>. Internet. Accessed 3 September 2003.

McAdam, N., 2001. "A Brain Styles Model of Change Responsiveness and distributed leadership in 21<sup>st</sup> Century Network Organizations." *International Journal of Organizational Behavior* Vol 5, No 7 (November 2002): 213-241.

Merton, R.K. *Social Theory and Social Structure*. New York: Free Press, 1964.

Moskos, Charles C., and Frank R. Wood, *The Military: More Than Just a Job?* Washington, D.C.: Pergamon-Brassey's International Defense Publishers, 1988.

Murry, Williamson. "Innovation: Past and Future." *Joint Forces Quarterly*, Summer 1996, 23-32.

Nicholls, J., "Beyond Situational Leadership – Congruent and Transforming Models for Leadership Training." *European Management Journal* Vol 4, no. 1 (Spring 1986): 41-50.

Noonan, Michael. P., and Mark R. Lewis. "Conquering the Elements: Thoughts on Joint Force (Re)Organization." *Parameters* Vol 33, no. 3 (Autumn 2003): 31-45.

"Online Learning of Complex Skills." United States Army Research Institute Newsletter Vol 12, Number 1 (Winter 2002): 11.

Pascarella, Perry J., "We've let technocrats lead us astray." *Management Review* Vol 86, Iss 8 (September 1997): 30-33.

Perkins, D. N. *The Mind's Best Work*. Cambridge, Mass.: Harvard University Press, 1981.

Peters, T. J., and R. H. Waterman Jr. *In Search of Excellence: Lessons from America's Best Run Companies*. New York: Harper and Row, 1982.

Pelz, Donald C., and Frank M. Andrews. *Scientists in Organizations: Productive Climates for Research and Development*. Ann Arbor: University of Michigan Press, 1976.

"Performance Management Practitioner Series: 360-Degree Assessment: An Overview," September 1997. Available from <<http://www.opm.govperform/wppd/360assess.pdf>>. Internet. Accessed 15 October 2003.

Ricks, Thomas, "The Widening Gap Between the Military and Society." *Atlantic Monthly*, July 1997, 66-78.

Rosanoff, Nancy. "Intuition Comes of Age: Workplace Applications of Intuitive Skill for Occupational and Environmental Health Nurses", April 1999. Journal on-line. Available from <<http://ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=retrieve&db=PubMed&listuids=10418345>>. Internet. Accessed 28 August 2003.

Rowan, Roy. *The Intuitive Manager*. Boston: Little, Brown Publishers, 1986.

Shamir, Boaz, and Eyal Ben-Ari. "Leadership in an Open Army? Civilian Connections, Interorganizational Frameworks, and Changes in Military Leadership." In *Out of the Box Leadership: Transforming the Twenty-First Century Army and Other Top Performing Organizations*, ed. James G. Hunt, George Dodge, and Leonard Wong, 33. Stamford, Conn: JAI Press, Inc., 1999.

Snider, Don. M., 2003, "Jointness, Defense Transformation, and the Need for a New Joint Warfare Profession." *Parameters* Vol 33, no 3 (Autumn 2003): 17-30.

Snider, Don. M., and Gayle L. Watkins. *The Future of the Army Profession*. New York: McGraw-Hill Companies, Inc., 2002.

Stratford, Sherman, "Leaders Learn to Heed the Voice Within." *Fortune*, 22 August 1994, 92-98.

Tesolin, Arupa. L. "How to Develop the Habit of Intuition", *Training & Development* Vol 54, Iss 3 (March 2000): 76-79.

Totten, Herman. L., and Ronald L. Keys. "The Road to Success." *Library Trends* Vol 43, Iss 1 (Summer 1994): 34.

Ulrich, M.P. "Infusing Civil-Military Relations norms in the Officer Corps." In *The Future of the Army Profession*, ed. Don M. Snider and Gayle L. Watkins, 248. New York: McGraw Hill Primus Custom Publishing, 2002.

United States Army War College Selected Readings, *Course 1: Strategic Leadership*. Carlisle Barracks, PA: USAWC, 2003, 584 pages.

U.S. Department of the Army. *Army Leadership: Be, Know, Do*. Army Field Manual 22-100. Washington, D.C.: U.S. Department of the Army, 31 August 1999.

U.S Department of the Army. *Army Training and Leader Development Panel Officer Study Report to the Army*. Washington D.C.: Department of the Army, 12 June 2000.

U.S. Department of the Army. *Officer Evaluation Report*, DA Form 67-9. Washington, D.C., U.S. Department of the Army, 1 October 1997.

U.S. Department of the Army. *U.S. Army Strategic Planning Guidance*. The Army Plan, Chapter 1. Washington D.C.: U.S. Department of the Army, 30 June 2002.

Vaughn, F. *Awakening Intuition*. Garden City: Anchor Books, 1979.

Walker, Wallace E. *Changing Organizational Culture: Strategy, Structure, and Professionalism in the U.S. General Accounting Office*. Knoxville: University of Tennessee Press, 1986.

Wong, Leonard. *Stifling Innovation: Developing Tomorrow's Leaders Today*. Carlisle, PA: Strategic Studies Institute, U.S. Army War College, 2002.

Von Oech, R. *A Whack on the Side of the Head*. New York: Warner Books, 1983.

Zwaenepoel, William, Michael Terk, Joseph Cavallaro, and Leslie Miller. "A Web-Based Engineering Design Tutor." Rice University Center for Technology in Teaching and Learning Online May 2002. Executive Summary from Carneige Mellon research grant application. Available from <<http://www.citi.rice.edu/research/mellon.shtml>>. Internet. Accessed 3 September 2003.

